



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

October 2023

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
October 2023

Hospital	District	Medicine ward			Pediatrics ward (≤12 years of age)			Coronary Care Unit (CCU)		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	13	1	8	22	2	9	6	0	0
RMCH	Rajshahi	11	1	9	16	0	0	0	0	0
CuMCH	Cumilla	16	2	13	13	1	8	0	0	0
KMCH	Khulna	10	3	30	16	2	13	0	0	0
JGH	Jashore	11	4	36	20	1	5	1	0	0
JRRMCH	Sylhet	6	1	17	20	3	15	0	0	0
SBMCH	Barishal	7	0	0	33	2	6	0	0	0
CMCH	Chattogram	21	2	10	22	1	5	1	0	0
MARMCH	Dinajpur	16	4	25	17	2	12	0	0	0
		111	18	16	179	14	8	8	0	0

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
October 2023

Hospital	District	Sample	Flu	Flu %	Flu A	Flu B	Flu A+B	Flu A/H1	Flu A/H3	Flu A/H5	Flu A/H7	Flu A/ (H1N1)pdm09	Flu B Yamagata lineage	Flu B Victoria lineage
JIMCH	Kishoregonj	41	3	7	3	0	0	0	2	0	0	1	0	0
RMCH	Rajshahi	27	1	4	1	0	0	0	0	0	0	1	0	0
CuMCH	Cumilla	29	3	10	1	2	0	0	0	0	0	1	0	2
KMCH	Khulna	26	5	19	5	0	0	0	0	0	0	5	0	0
JGH	Jashore	32	5	16	3	2	0	0	0	0	0	3	0	2
JRRMCH	Sylhet	26	4	15	3	1	0	0	3	0	0	0	0	1
SBMCH	Barishal	40	2	5	2	0	0	0	1	0	0	1	0	0
CMCH	Chattogram	44	3	7	2	1	0	0	1	0	0	1	0	1
MARMCH	Dinajpur	33	6	18	5	1	0	0	0	0	0	5	0	1
		298	32	11	25	7	0	0	7	0	0	18	0	7

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
October 2023

Hospital	District	SARI (aged $\geq$ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	25	2	8	16	1	6
RMCH	Rajshahi	13	1	8	14	0	0
CuMCH	Cumilla	19	3	16	10	0	0
KMCH	Khulna	12	4	33	14	1	7
JGH	Jashore	18	4	22	14	1	7
JRRMCH	Sylhet	9	2	22	17	2	12
SBMCH	Barishal	19	0	0	21	2	10
CMCH	Chattogram	27	2	7	17	1	6
MARMCH	Dinajpur	20	4	20	13	2	15
		162	22	14	136	10	7

Hospital based influenza surveillance
Influenza results by different age groups
October 2023

Age groups	October 2023						Initiation - October 2023								
	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			SARI (aged ≥ 5 years)			ILI [‡]			SARI (aged < 5 years)		
	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
<1 Year	-	-	-	106	7	7	-	-	-	2,813	193	7	10,640	616	6
1-4 Years	-	-	-	30	3	10	-	-	-	4,581	651	14	4,587	657	14
5-14 Years	44	6	14	-	-	-	5,120	1089	21	2,790	652	23	-	-	-
15-24 Years	23	2	9	-	-	-	5,176	1204	23	2,706	535	20	-	-	-
25-39 Years	28	2	7	-	-	-	5,516	1063	19	2,291	374	16	-	-	-
40-59 Years	35	4	11	-	-	-	6,961	1105	16	1,487	229	15	-	-	-
≥ 60 Years	32	8	25	-	-	-	7,106	1097	15	500	55	11	-	-	-
	162	22	14	136	10	7	29,879	5,558	19	17,168	2,689	16	15,227	1,273	8

[‡]Outpatient ILI surveillance discontinued in October 2023.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation (May 2007) - October 2023

Hospital	District	Initiation	Sample	Flu	Flu %	Flu A ^ψ	Flu B ^λ	Flu A+B [‡]	Flu A/H1	Flu A/H3	Flu A/H5	Flu A/H7	Flu A/ (H1N1)pdm09	Flu B Yamagata lineage	Flu B Victoria lineage
DNMCH ^γ	Dhaka	Jun 2007	2,061	312	15	201	111	0	15	84	0	0	102	13	7
CBMCH ^γ	Mymensingh	Oct 2007	2,053	302	15	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	7,755	1,427	18	919	507	1	9	500	0	0	408	64	273
RMCH	Rajshahi	May 2007	5,150	590	11	396	194	0	14	233	0	0	147	39	94
SZRMCH ^γ	Bogura	Sep 2007	3,865	653	17	439	213	1	12	256	0	0	170	29	39
LAMB [†]	Dinajpur	Oct 2007	1,171	112	10	72	40	0	7	41	0	0	24	1	0
BBMH [†]	Chattogram	Aug 2007	1,440	157	11	118	39	0	13	42	0	0	63	3	0
CuMCH [‡]	Cumilla	Oct 2007	6,589	806	12	533	270	3	9	286	0	0	237	28	92
KMCH	Khulna	Jul 2007	4,401	606	14	415	190	1	16	218	0	0	177	17	112
JGH ^γ ¹	Jashore	Sep 2007	5,790	1182	20	730	449	3	10	411	0	0	309	26	285
JRRMCH	Sylhet	Jul 2007	5,737	932	16	584	346	2	16	281	0	0	286	34	169
SBMCH	Barishal	Aug 2007	7,638	1060	14	685	371	4	7	336	0	0	338	56	166
CMCH	Chattogram	Apr 2014	5,202	842	16	566	272	4	0	267	0	0	299	41	211
MARMCH ²	Dinajpur	Apr 2014	3,422	539	16	319	220	0	0	158	0	0	158	28	171
			62,274	9,520	15	6,183	3,318	19	135	3,220	1	0	2,809	395	1,629

^λDetermination of influenza B lineage initiated in January 2016.

^ψrRT-PCR result of four samples were equivocal positive for Influenza A.

^ψOne sample collected in June 2013 and another sample collected in June 2017 were co-infected with both A(H3) and A(H1N1)pdm09.

^λThree samples were co-infected with both Influenza B (Yamagata lineage) and Influenza B (Victoria lineage), another ten samples were unsubtypeable.

[‡]Three samples were co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

^γNine samples were co-infected with both Influenza A(H3) and Influenza B (Victoria lineage).

[†]Surveillance activities ended at LAMB (Dinajpur) and BBMH (Chittagong) in May 2016.

^γSurveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogra) and JGH (Jessore) in October 2017.

[‡]Surveillance activities reinitiated at Cumilla Medical College Hospital (CuMCH), Cumilla in January 2018.

[†]Surveillance activities reinitiated at Jashore 250 bed General Hospital (JGH), Jashore in December 2018.

²Dinajpur Medical College Hospital (DjMCH) has been renamed as M Abdur Rahim Medical College Hospital (MARMCH).

Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

^φ Intensive care units (ICU) surveillance discontinued in January 2019.

*One sample from CuMCH (Cumilla) and two samples from KMCH (Khulna) collected in November 2019 were not true positive for influenza A and were considered as inconclusive result. The result will be confirmed with further test through viral culture.

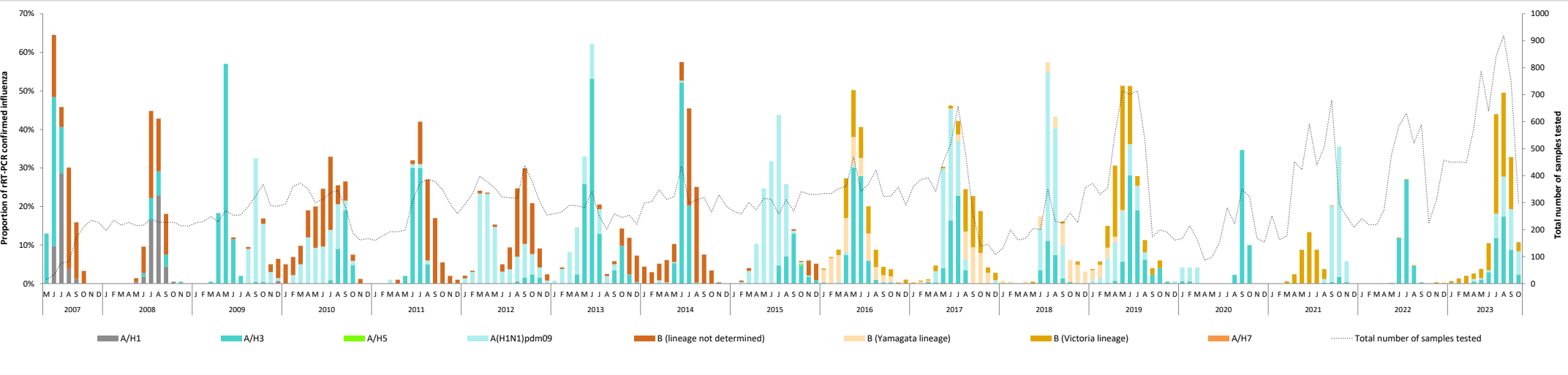
¹Nine samples (one each from JIMCH, JRRMCH and MARMCH and two each from RMCH, KMCH and SBMCH) collected in December 2019 were not true positive for influenza A and were considered as inconclusive result. The result will be confirmed with further test through viral culture.

Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022.

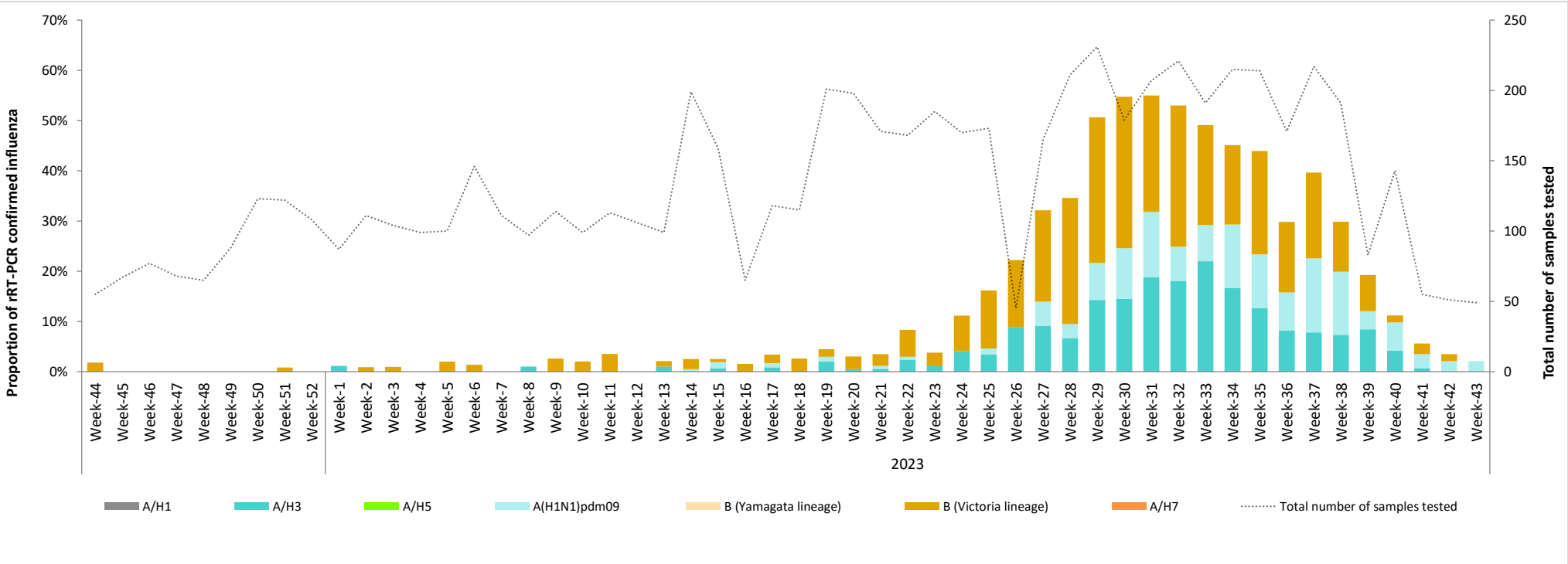
Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

Outpatient ILI surveillance discontinued in October 2023.

Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - October 2023



Hospital based influenza surveillance
Influenza seasonality graph
Week 44 of 2022 to week 43 of 2023



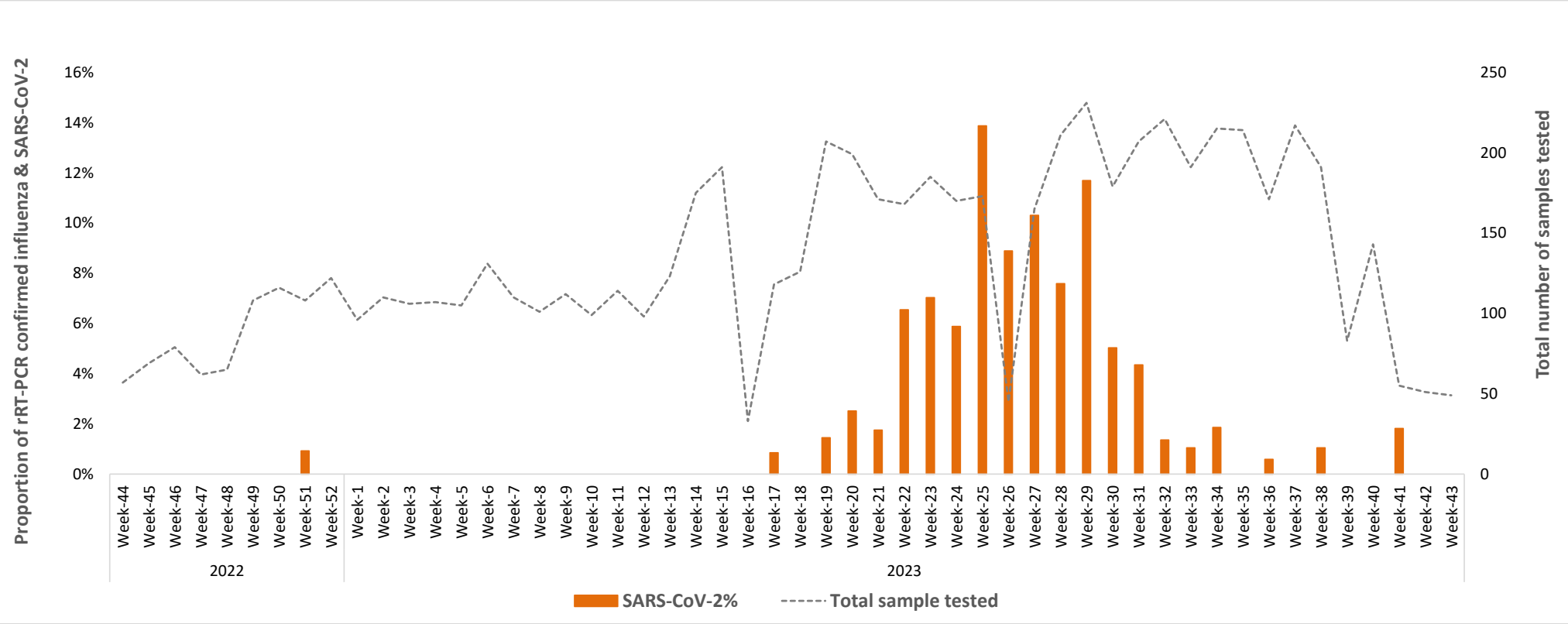
Hospital based influenza surveillance
Hospitalwise SARS-CoV-2 lab results
October 2023

Hospital	District	October 2023			March 2020 - October 2023		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	41	0	0	2,362	130	6
RMCH	Rajshahi	27	0	0	1,683	141	8
CuMCH	Cumilla	29	0	0	1,611	123	8
KMCH	Khulna	26	0	0	1,422	202	14
JGH	Jashore	32	0	0	1,906	190	10
JRRMCH	Sylhet	26	0	0	1,904	172	9
SBMCH	Barishal	40	1	3	2,031	164	8
CMCH	Chattogram	44	0	0	2,661	241	9
MARMCH	Dinajpur	33	0	0	1,759	121	7
		298	1	0.3	17,339	1,484	9

Hospital based influenza surveillance
SARS-CoV-2 results by different age groups
October 2023

Age groups	October 2023			March 2020 - October 2023		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	106	0	0	4151	139	3
1-4 Years	30	0	0	2511	33	1
5-14 Years	44	0	0	2,190	47	2
15-24 Years	23	0	0	1,634	96	6
25-39 Years	28	1	4	1,909	284	15
40-59 Years	35	0	0	2,541	465	18
≥ 60 Years	32	0	0	2,403	420	17
	298	1	0.3	17,339	1,484	9

Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 44 of 2022 to week 43 of 2023



Hospital based influenza surveillance

Influenza and SARS-CoV-2 positivity graph

March 2020 - October 2023

